

# **Calibration Report: Pyrometer (Infrared Radiation Thermometer) S/N: 1414**

1 September 2010

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Hampton, Virginia

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## **Summary**

Calibration date: 1 Sep 2010

Next Calibration date: 1 Sep 2011

A collection, analysis and calibration of data from a Heitronics Pyrometer (Infrared Radiation Thermometer or IRT), S/N: 1414, has been completed. The calibration was performed by Wintronics, Inc. These data were collected by Wintronics on 1 September 2010.

Model: KT19.85  
Serial Number: 1414

The test data presented in table format is displayed on the next page. The deviation in degrees Celsius was within tolerance "as received" and "outgoing". Since this IRT will be used as a sea surface temperature measurement device, the numbers of most value are between 0-40 degrees C (273.15-313.15 Kelvin). It is determined an offset of +0.3 degrees C (0.30 Kelvin) will be applied to instrument data. Wintronics, Inc. quality program is registered to ISO 9001:2000. Traceability is achieved through calibrations to NIST (National Institute of Standards and Technology) or compared to consensus standards.

The following pages provide more detail into the calibration process and results.

Application: Standard Campbell datalogger program for KT19.85 pyrometer.

**Wintronics, Inc.**  
50 Division Avenue  
Millington, NJ 07946  
Phone: (908) 647-0144 Fax: (908) 647-8379

## Certificate of Calibration

ANSI/NCSL Z540-1-1994

Certificate No.: **J0086044**

Manufacturer: <b>Heitronics</b>	Description: <b>Infrared Thermometer</b>
Model No: <b>KT19.85</b>	Serial No: <b>1414</b>

Customer: **SSAI**  
Customer PO: **PO-0000271**  
Customer Asset No:

Temperature (C): 23  
Humidity (%): 38  
Procedure: W60985


Technician: **PLW**  
Date Cal: **9/1/2010**  
Date Due: **9/1/2011**

The manufacturer's specifications of the above instrument have been confirmed by comparison to standards which are regularly calibrated using accepted values of natural physical constants, ratio type self-calibrating techniques, comparison to standards which are traceable to NIST, or compared to consensus standards. Wintronics' calibration procedures comply with ANSI/NCSL Z540-1 & MIL-STD-45662A. Wintronics' Quality program is registered to ISO9001:2000.

As received condition: **In Tolerance**  
As shipped condition: **In Tolerance**  
Type of Calibration: **Normal**

### Calibration Standards

Manufacturer	Model	Description	Asset #	Calibration Date	Date Due	Cert. No.
Hart Scientific	5610-9	Thermistor Probe	W195	4/13/2010	4/13/2011	J0084324
Hart Scientific	2563	Module, Thermistor	W143	8/18/2010	8/18/2011	J0086252

 **Peter Winter**  
President

Job: J0086044

Company: SSAI

Mfg: **Heitronics**

Model: **KT19.85(-II)**

Date: 09/01/10

S/N: 1414

Cust. Asset #:

Tech: PLW

Additional Comments: Any Test Uncertainty Ratio (TUR) that is less than 4:1 will appear under the "TUR" heading. If the TUR meets or exceeds 4:1, the field is left blank.  
Standards listed used to monitor temperature of Mester ME20.03 Blackbody Calibration Source.

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